# The Social Psychology of Masking Among Undergraduates in a Predominantly Conservative Region

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The COVID-19 pandemic resulted in mask mandates on college campuses across the United States, and the reasons for disagreement with them by students in conservative regions are unknown. This study sought to explain the affective, behavioral, and cognitive (ABC) components of college students' attitudes toward wearing a mask in the classroom according to the ABC model of attitude formation. Participants (N = 40) responded to eight open-ended, anonymous written interview prompts, which were coded and themed according to the grounded theory of qualitative research. Results indicated that cognitions about masking in general were varied, even among students in a predominantly conservative region. Participant cognitions about wearing a mask in the classroom ranged from the desire to protect self and others to discomfort and annoyance. Participants frequently reported experiences of negative affect while wearing a mask in the classroom, with perceived isolation reported as the most frequent issue related to negative affect. Participants frequently reported less classroom participation because of the mandate to wear a mask in the classroom, but they also frequently reported that they complied despite the cognitive and affective problems due to their desire to obey, social responsibility, and values regarding the care of others.

xaminations of political affiliation and masking practices have revealed that political conservatism is negatively associated with pandemic safety protocols (Camobreco and He 2022), such as favorable attitudes about wearing a mask (Greene et al. 2022; Young et al. 2022). However, colleges and universities across the political spectrum enforced mask mandates in response to the COVID-19 pandemic. The attitudes of undergraduate students in a predominantly conservative region regarding wearing a mask in the classroom are unknown.

#### THE CURRENT STUDY

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The purpose of this study was to describe the affective, behavioral, and cognitive (ABC) components of undergraduate students in a predominantly conservative region (Eagly and Chaiken 1993, 1998; Fazio and Olson 2003) about wearing a mask in the university classroom. The ABC model is a social psychological model that

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addresses attitude formation by analyzing the relationships among feelings, actions, and thoughts on any topic. Previous research on attitudes about COVID-19 safety protocols also have used the ABC model (Mathur 2021).

# **DATA COLLECTION METHODS**

Participants were recruited by a convenience sample in four undergraduate psychology courses within a private, religious-affiliated university in a predominantly conservative region of the United States. Recruitment and interviews took place during the 2022 Fall semester. Participants read an implied-consent form and voluntarily responded to eight written interview questions. They did not receive any compensation. Because of the extent of anonymity involved in data collection, exact demographic information of the sample was unknown. However, all participants were traditional undergraduate students from a variety of majors, as reported by the professor of the courses.

Forty participants responded to the following eight anonymous, open-ended written prompts regarding their attitude about wearing a mask during the height of the COVID-19 pandemic:

- Describe your feelings about wearing a mask.
- In what situations, if any, did you wear a mask even though you thought you didn't want to during the COVID-19 pandemic?
- Describe how you felt about wearing a mask to class during the COVID-19 pandemic.
- What impact did masking in the classroom have on your mood?
- What impact did masking in the classroom have on your classroom participation?
- Describe your reasons for wearing a mask to class during the COVID-19 pandemic.
- Did you ever challenge the mandate or instruction to wear a mask in class, and why or why not?
- If you did challenge the mask mandate, how did you challenge it?

that followed naturally elicited responses regarding their attitudes as students recounted their experiences of wearing a mask to class during the height of the COVID-19 pandemic.

#### Affect

Eight participants reported that wearing a mask had no impact on their mood in class; one participant reported a *fine* mood when wearing a mask in class, and one participant reported that it was nice to have anonymity while also reporting that they felt isolated. Twenty-nine participants reported a negative mood while wearing a mask in class. The most commonly reported negative mood states reported were isolation and loneliness. As two participants reported: "It [wearing a mask in class] made me feel like people

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# DATA ANALYSIS METHODS

While teaching courses during the pandemic, I noted affective and behavioral changes of students. Grounded theory is well suited for comparing previous knowledge with new responses (Strauss 1987). I sorted the responses by question and used a groundedtheory approach to data analysis. Using the participants' own words, I derived initial categories (Strauss 1987 and then conducted focused coding because certain responses were noted frequently (Glaser and Holton 2004). The next step was a constant comparison among categories that emerged in prior coding steps for the final themes to emerge. Throughout the coding process, I took notes to make connections between emerging themes and concepts in psychological literature (Corbin and Strauss 1990). Another professional researcher and a master's-level research assistant also independently coded the data, which yielded a 94% intercoder reliability. The two additional coders approved the written results, which included the themes initially agreed to by all three coders.

#### **RESULTS**

This article presents results by themes that emerged during the data analysis. Participants offered various responses about wearing a mask in general. Favorable responses cited the desire for the perceived or real safety of others and the comfort of self and others. Unfavorable responses cited personal discomfort, annoyance, and the politicalization of wearing a mask. An additional subset of participants reported a combination of these responses, including this statement from a participant: "Though wearing a mask is not the most physically comfortable thing and could be annoying at times to remember, I did not mind wearing it if it meant contributing to the safety and peace of mind of others."

The classroom was the most commonly reported place where participants wore a mask even though they did not want to do so. Other settings that were commonly reported as places that participants wore a mask against their will were work, church, and during family and social activities. According to Eagly and Chaiken (1993, 1998), attitudes involve cognition, emotions, and sometimes behaviors. Considering the frequency of responses citing school as an undesirable place to wear a mask, the questions

couldn't see me" and "[I] felt as if I couldn't connect with people and it made me lonely." Feelings of isolation were followed by anxiety, stress, and tension; anger and irritability; sadness; and frustration. One participant who expounded on their sadness stated: "It [wearing a mask in class] made me sad because I could not see people smile."

# **Behavior**

Behaviors reported in this study included details of class participation and behaviors that conveyed compliance or noncompliance with the mask mandate.

# Class Participation

No participants reported that they participated more while wearing a mask in class, and 22 participants reported that their classroom participation was unaffected. Responses such as "None [change in participation]—I rarely participate in class because I'm shy" and "I'm pretty talkative, so not a lot [of change in participation]" indicate that participants with dispositional traits that make them more or less likely to participate may not be as impacted by changes such as wearing a mask in class. One participant reported minimal impact but did not elaborate on whether that impact was more or less participation; 17 participants reported less participation. Participants who expounded on the decrease in participation cited difficulty talking through the mask as a reason: "It decreased my participation because I did not want to have to repeat myself when people couldn't hear my already quiet voice."

# Compliance

Thirty-two participants reported that they never challenged the mask mandate despite the prevalence of negative cognitions and emotions regarding wearing a mask in the classroom. Only eight participants reported that they challenged the mask mandate in the classroom because of their disagreement with it, and only one of those participants reported direct refusal. Methods of challenging but not directly refusing the mask mandate included politely asking the teacher if they could take off the mask and intentionally pulling the mask down while talking or when they felt distanced

from others. An evasive practice also was noted by one dissenter who reported: "I would constantly take sips of water to be able to pull down my mask, and I'd leave it down until someone said something."

Twenty-five students reported that they wore a mask in class during the height of the COVID-19 pandemic because it was a requirement for attending school. Six additional participants cited obedience and honor of authority among their reasons for wearing a mask in the classroom. Nine other participants reported that they wore a mask in class to respect what would make others' comfortable, for their own health, or for the health of others. Two

included physical discomfort and annoyance, perceived social isolation (PSI), a decrease in participation, and conflicted compliance.

Negative affect was reported frequently by the participants as they recounted their experience of wearing a mask in the classroom. Negative affect was previously associated with mask wearing, especially for college students who wear them often instead of always. This indicates that those who wore a mask in all public spaces as a personal choice likely experienced less negative affect than those who wear a mask only when required (e.g., in the classroom) (Wang et al. 2020). Participants who discussed their negative affect frequently reported PSI in the classroom. PSI is

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notable responses included "I wanted to do the right thing—obey, and keep others safe if I was sick" and "My philosophy is that masking did prevent the spread of germs to others and it was an easy way to show respect and concern for others' well-being." Social responsibility was a recurring reason among dissenters for wearing a mask in the classroom who conformed anyway, as one participant reported: "I felt uncomfortable, hot, sweaty, and itchy. It was often difficult to breathe, and I felt like I was looked at weird if I didn't wear a mask. I still wore one in close quarters because I felt a social responsibility to wear one."

# Cognition

Two participants of 40 reported favorable thoughts about wearing a mask in class, stating that they were wearing it in other places as well or that they have vulnerable family members to protect. Twenty-two participants reported unfavorable thoughts related to wearing a mask in class, and 16 participants responded neutrally or with both a favorable and an unfavorable statement. Unfavorable cognitions about mask wearing fit into three themes: difficulty understanding teachers and peers, difficulty understanding emotions of others due to lack of nonverbal cues, and personal physical or emotional discomfort.

# **DISCUSSION**

Considering that the objection to mask wearing is associated with conservatism (Greene et al. 2022; Young et al. 2022), examining thoughts, feelings, and behaviors about wearing a mask in the

associated with hypervigilance, which may account for the feelings of anxiety, stress, and anger reported by some participants. PSI also is known to be associated with sadness (Layden et al. 2017).

Participants frequently reported less participation when wearing a mask in the classroom. Some reports involved difficulty hearing professors speaking through a mask and difficulty in providing responses loud enough to be heard through their own mask, which supports accounts from previous research (Ribeiro et al. 2020). However, an unidentified mediator of the impact of wearing a mask on classroom participation may be PSI. In addition to associations with negative affect, PSI is associated with neurological changes that negatively impact executive functions in emerging adults, such as alertness, encoding, and sustained attention to tasks (Layden et al. 2017). Future research could focus on measuring variables associated with isolation and executive function while wearing a mask in the classroom.

Nevertheless, the majority of participants reported that they wore a mask in the classroom because it was required and they did not challenge the mandate. This finding highlights two important ideas in social psychology. First, the cognitive and affective components of attitudes, such as those regarding wearing a mask in the classroom, are poor predictors of behavior (Wicker 1971). This was noted in the overall reporting of compliance with the campus mask mandate despite cognitive objections and negative affect. Second, social influence (Hewlin 2009) and obedience (Burger 2009) were motivators for compliance with health protocols during COVID-19, especially for individuals who are religious (Suryani and

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classroom revealed important views of undergraduate students in a predominantly conservative region. This study revealed that general perceptions about masking vary, but many participants did not want to wear a mask in the classroom. Objections fit into cognitive, emotional, and behavioral categories. These issues Siregar 2021). Considering that the university from which the sample was recruited is not only conservative but also religiously affiliated, it is not surprising that one participant reported that they wore a mask even when they did not want to because "It was a way to love my neighbor," a tenet of the Christian faith.

#### LIMITATIONS AND IMPLICATIONS

Limitations of the study involved a convenience sample of participants from undergraduate psychology courses, although they represented a variety of university majors. Additionally, written interviews may have elicited less thorough responses than oral interviews or focus groups.

Wearing a mask in the classroom was mandated for various lengths of time during the COVID-19 pandemic, and perceptions about wearing a mask are likely to be unfavorable at universities in predominantly conservative regions (Hunt et al. 2022; Young et al. 2022). Student safety is likely more of a motivating factor than politicalization of mask mandates at these and other universities. However, PSI is a concern for educators because of its associations with negative affect and executive control (Layden et al. 2017), which may impede learning and participation in the university classroom. Moreover, whereas conservatives may cite personal freedom as an argument against wearing a mask, this study acknowledges the dissention-mitigating factors of concern for others, social responsibility, and personal and religious values that motivated undergraduates in a predominantly conservative region to comply with health protocols. Universities in conservative regions can increase compliance with wearing a mask and vaccinating by displaying public service announcements from conservative leaders or from leaders who are perceived to share similar values as college students in conservative regions (Hunt et al. 2022; Pink et al. 2021).

#### CONFLICTS OF INTEREST

The author declares that there are no ethical issues or conflicts of interest in this research.

# DATA AVAILABILITY STATEMENT

The editors have granted an exception to the data policy for this manuscript. In this case, replication data are not available on Dataverse and the editors have not verified reproducibility of the published results. This exception was granted because the approval granted by the authors' Instititonal Review Board does not permit sharing of the underlying data.

# REFERENCES

- Burger, Jerry M. 2009. "Replicating Milgrim: "Would People Still Obey Today?" American Psychologist 64:1–11. http://doi.org/10.1037/a0010932.
- Camobreco, John F., and Zhaochen He. 2022. "The Party-Line Pandemic: A Closer Look at the Partisan Response to COVID-19." *PS: Political Science & Politics* 55 (1): 13–21. https://doi.org/10.1017/S1049096521000901.

- Corbin, Juliet, and Anslem Strauss. 1990. "Grounded-Theory Research:
  Procedures, Cannons, and Evaluative Criteria." Qualitative Sociology 19 (6):
  418–27.
- Eagly, Alice H., and Shelly Chaiken. 1993. *The Psychology of Attitudes*. Fort Worth, TX: Harcourt Brace.
- Eagly, Alice H., and Shelly Chaiken. 1998. "Attitude Structure and Function." In *The Handbook of Social Psychology*, 4th edition, ed. Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey, 269–322. New York: McGraw-Hill.
- Fazio, Russell H., and Michael A. Olson. 2003. "Attitudes: Foundations, Functions, and Consequences." In *The SAGE Handbook of Social Psychology*, ed. Michael A. Hogg and Joel Cooper, 139–60. London: SAGE Publications.
- Glaser, Barney G., and Judith Holton. 2004. "Remodeling Grounded Theory." Forum: Qualitative Social Research 5 (2). http://doi.org/10.17169/fqs-5.2.607.
- Greene, Steven, Marc Hetherington, Rahsaan Maxwell, and Timothy J. Ryan. 2022. "Public Service Announcements and Promoting Face Masks During the COVID-19 Pandemic." *PS: Political Science & Politics* 55 (1): 7–12. https://doi.org/10.1017/S1049096521001086.
- Hewlin, Patricia F. 2009. "Wearing the Cloak: Antecedents and Consequences of Creating Facades of Conformity." *Journal of Applied Psychology* 94 (3): 727–41. https://doi.org/10.1037/a0015228.
- Hunt, Melissa G., Daniel Chiarodit, Tiffany Tieu, and Julie Baum. 2022. "Using Core Values and Social Influence to Increase Mask-Wearing in Non-Compliant College Students." Social Science and Medicine 314:1–8. http://doi.org/j.socscimed.2022.115446.
- Layden, Elliot A., John T. Cacioppo, Stephanie Cacioppo, Stefano F. Cappa, Alessandra Dodich, Andrea Falini, and Nicola Canessa. 2017. "Perceived Social Isolation Is Associated with Altered Functional Connectivity in Neural Networks Associated with Tonic Alertness and Executive Function." NeuroImage 145 (PtA): 58–73. http://doi.org/10.1016/j.neuroimage.2016.09.050.
- Mathur, Devasheesh. 2021. "Emerging Attitudes of Laypeople Towards Lockdown during COVID-19: An Exploration of Attitude Types Through Q-Methodology." *Journal of Public Health and Development* 19 (3): 130–42.
- Pink, Sophia L., James Chu, James N. Druckman, David G. Rand, and Robb Willer. 2021. "Elite Party Cues Increase Vaccination Intentions Among Republicans." Proceedings of the National Academy of Sciences 118 (32): 1–3. https://doi.org/10.1073/pnas.2106559118.
- Ribeiro, Vanessa V., Ana Paula Dassie-Leite, Elaine Cristina Pereira, Allicia Diely Nunes Santos, Perla Martins, and Roxane de Alencar Irineu. 2020. "Effect of Wearing a Face Mask on Vocal Self-Perception During a Pandemic." *Journal of Voice* 36 (6): 878.e–878.e7.
- Strauss, Ansel L. 1987. *Qualitative Analysis for Social Scientists*. Cambridge, UK: Cambridge University Press.
- Suryani, Des, and Pinta Pudiyanti Siregar. 2021. "Religiosity and Obedience Health Protocols COVID-19: A Positive Correlation in Medan-North Sumatera." Buletin Farmatera 6 (3): 195–204. http://jurnal.umsu.ac.id/index.php/buletin\_farmatera
- Wang, Yali, Xiang Jing, Wantong Han, Yurong Jing, and Lingzhong Xu. 2020. "Positive and Negative Affect of University and College Students During COVID-19 Outbreak: A Network-Based Survey." *International Journal of Public Health* 65 (October): 1437–43. https://doi.org/10.1007/s00038-020-01483-3.
- Wicker, Allan W. 1971. "An Examination of the Other Variables Explanation of Attitude–Behavior Inconsistency." *Journal of Personality and Social Psychology* 19: 18–30. https://doi.org/10.1037.h0031090.
- Young, Dannagal G., Huma Rasheed, Amy Bleakley, and Jessica B. Langbaum. 2022. "The Politics of Mask-Wearing: Political Preferences, Reactance, and Conflict Aversion During COVID." *Social Science and Medicine* 298 (February): 1–10. https://doi.org/10.1016/j.socscimed.2022.114836.